

SEQUENCE LISTING

<110> Kaneka Corporation

<120> Three-dimensional structure of decarbamilase and the use thereof

<130> J199247416

<140>ND

<141>1999-08-31

<160> 2

<170> PatentIn Ver. 2.0

<210> 1

<211> 303

<212> PRT

<213> Agrobacterium sp.

<400> 1

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Ala Glu Thr Arg Glu Gln Val Val Val Arg Leu Leu Asp Met Leu Thr
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35 40 45

Leu Thr Thr Phe Phe Pro Arg Trp His Phe Thr Asp Glu Ala Glu Leu
50 55 60

Asp Ser Phe Tyr Glu Thr Glu Met Pro Gly Pro Val Val Arg Pro Leu
65 70 75 80

Phe Glu Lys Ala Ala Glu Leu Gly Ile Gly Phe Asn Leu Gly Tyr Ala
85 90 95

Glu Leu Val Val Glu Gly Gly Val Lys Arg Arg Phe Asn Thr Ser Ile
100 105 110

Leu Val Asp Lys Ser Gly Lys Ile Val Gly Lys Tyr Arg Lys Ile His
115 120 125

Leu Pro Gly His Lys Glu Tyr Glu Ala Tyr Arg Pro Phe Gln His Leu
130 135 140

Glu Lys Arg Tyr Phe Glu Pro Gly Asp Leu Gly Phe Pro Val Tyr Asp
145 150 155 160

85								90				95			
Glu	Leu	Val	Val	Glu	Gly	Gly	Val	Lys	Arg	Arg	Phe	Asn	Thr	Ser	Ile
			100					105					110		
Leu	Val	Asp	Lys	Ser	Gly	Lys	Ile	Val	Gly	Lys	Tyr	Arg	Lys	Ile	His
		115					120					125			
Leu	Pro	Gly	His	Lys	Glu	Tyr	Glu	Ala	Tyr	Arg	Pro	Phe	Gln	His	Leu
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Glu	Lys	Arg	Tyr	Phe	Glu	Pro	Gly	Asp	Leu	Gly	Phe	Pro	Val	Tyr	Asp
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Val	Asp	Ala	Ala	Lys	Met	Gly	Met	Phe	Ile	Cys	Asn	Asp	Arg	Arg	Trp
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Pro	Glu	Ala	Trp	Arg	Val	Met	Gly	Leu	Arg	Gly	Ala	Glu	Ile	Ile	Cys
			180					185					190		
Gly	Gly	Tyr	Asn	Thr	Pro	Thr	His	Asn	Pro	Glu	Val	Pro	Gln	His	Asp
		195					200					205			
His	Leu	Thr	Ser	Phe	His	His	Leu	Leu	Ser	Met	Gln	Ala	Gly	Ser	Tyr
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Gln	Asn	Gly	Ala	Trp	Ser	Ala	Ala	Ala	Gly	Lys	Ala	Gly	Met	Glu	Glu
225					230					235					240
Asn	Cys	Met	Leu	Leu	Gly	His	Ser	Cys	Ile	Val	Ala	Pro	Thr	Gly	Glu
				245					250					255	
Ile	Val	Ala	Leu	Thr	Thr	Thr	Leu	Glu	Asp	Glu	Val	Ile	Thr	Ala	Ala
			260					265					270		
Val	Asp	Leu	Asp	Arg	Cys	Arg	Glu	Leu	Arg	Glu	His	Ile	Phe	Asn	Phe
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Lys	Gln	His	Arg	Gln	Pro	Gln	His	Tyr	Gly	Leu	Ile	Ala	Glu	Leu	
	290					295					300				

Val Asp Ala Ala Lys Met Gly Met Phe Ile Cys Asn Asp Arg Arg Trp
 165 170 175
 Pro Glu Ala Trp Arg Val Met Gly Leu Arg Gly Ala Glu Ile Ile Cys
 180 185 190
 Gly Gly Tyr Asn Thr Pro Thr His Asn Pro Pro Val Pro Gln His Asp
 195 200 205
 His Leu Thr Ser Phe His His Leu Leu Ser Met Gln Ala Gly Ser Tyr
 210 215 220
 Gln Asn Gly Ala Trp Ser Ala Ala Ala Gly Lys Val Gly Met Glu Glu
 225 230 235 240
 Asn Cys Met Leu Leu Gly His Ser Cys Ile Val Ala Pro Thr Gly Glu
 245 250 255
 Ile Val Ala Leu Thr Thr Thr Leu Glu Asp Glu Val Ile Thr Ala Ala
 260 265 270
 Val Asp Leu Asp Arg Cys Arg Glu Leu Arg Glu His Ile Phe Asn Phe
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 Lys Gln His Arg Gln Pro Gln His Tyr Gly Leu Ile Ala Glu Leu
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 <213> E.coli

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 Ala Glu Thr Arg Glu Gln Val Val Val Arg Leu Leu Asp Met Leu Thr
 20 25 30
 Lys Ala Ala Ser Arg Gly Ala Asn Phe Ile Val Phe Pro Glu Leu Ala
 35 40 45
 Leu Thr Thr Phe Phe Pro Arg Trp Tyr Phe Thr Asp Glu Ala Glu Leu
 50 55 60
 Asp Ser Phe Tyr Glu Thr Glu Met Pro Gly Pro Val Val Arg Pro Leu
 65 70 75 80
 Phe Glu Lys Ala Ala Glu Leu Gly Ile Gly Phe Asn Leu Gly Tyr Ala